REMARKS

Claims 1-2, 4-12, 14-22, and 24-25 are all the claims pending in the application. Applicants respectfully acknowledge that claims 3, 6-9, 13, 16-19, and 23 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1-2, 4-5, 10-12, 14-15, 20-22, and 24-25, stand rejected on prior art grounds. Claims 1, 6, 11, 16, and 21 are amended herein. Claims 3, 13, and 23 are cancelled without prejudice or disclaimer. Claims 1, 11, and 21 have been amended to include the limitations of dependent claims 3, 13, and 23, respectively, which the Office Action indicated included allowable subject matter. Claims 6 and 16 have been rewritten in independent form to include the limitations of the respective base claims, and as such immediate allowance of all the claims is respectfully requested. Applicants respectfully traverse the rejections based on the following discussion.

I. The Prior Art Rejections

Claims 1-2, 4-5, 10-12, 14-15, 20-22, and 24-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wei, et al. (U.S. Patent No. 6,852,582), hereinafter referred to as "Wei", in view of Unger (U.S. Patent No. 6,777,960), and in further view of Sheets II, et al. (U.S. Patent No. 6,043,689), hereinafter referred to as "Sheets". Applicants respectfully traverse these rejections based on the following discussion.

The amended claimed invention, as provided in amended independent claims 1, 11, and 21 and rewritten independent claims 6 and 16 include features, which are patentably distinguishable from the prior art references of record. Specifically, amended independent claim 1 provides, in part, "...wherein said CNT FET is adapted to measure

stress and strain in said integrated circuit, wherein said stress and strain comprise any of mechanical and thermal stress and strain." This feature was previously provided in original dependent claim 3 (now cancelled without prejudice or disclaimer), which the Office Action indicates is allowable subject matter. Hence, amended independent claim 1 and dependent claims 2, 4, 5, and 10, by dependency, are in condition for immediate allowance.

Likewise, amended independent claim 11 provides, in part, "...wherein said CNT FET is adapted to measure stress and strain in said integrated circuit, wherein said stress and strain comprise any of mechanical and thermal stress and strain." This feature was previously provided in original dependent claim 13 (now cancelled without prejudice or disclaimer), which the Office Action indicates is allowable subject matter. Hence, amended independent claim 11 and dependent claims 12, 14, 15, and 20, by dependency, are in condition for immediate allowance.

Similarly, amended independent claim 21 provides, in part, "...measuring stress and strain in said integrated circuit using said CNT FET, wherein said stress and strain comprise any of mechanical and thermal stress and strain." This feature was previously provided in original dependent claim 23 (now cancelled without prejudice or disclaimer), which the Office Action indicates is allowable subject matter. Hence, amended independent claim 21 and dependent claims 22 and 24-25, by dependency, are in condition for immediate allowance.

It is noted that the Office Action has attempted to combine three separate references, Wei, Unger, and Sheets, in order to try and teach, but failing nonetheless, the claimed invention, which is indicative of unobviousness.

Insofar as references may be combined to teach a particular invention, and the proposed combination of Wei with Unger and Sheets, case law establishes that, before any prior-art references may be validly combined for use in a prior-art 35 U.S.C. § 103(a) rejection, the individual references themselves or corresponding prior art must suggest that they be combined.

For example, in In re Sernaker, 217 USPQ 1, 6 (C.A.F.C. 1983), the court stated: "[P]rior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings." Furthermore, the court in Uniroyal, Inc. v. Rudkin-Wiley Corp., 5 USPQ 2d 1434 (C.A.F.C. 1988), stated, "[w]here prior-art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself. . . . Something in the prior art must suggest the desirability and thus the obviousness of making the combination."

In the present application, the reason given to support the proposed combination is improper, and is not sufficient to selectively and gratuitously substitute parts of one reference for a part of another reference in order to try to meet, but failing nonetheless, the Applicant's novel claimed invention. Furthermore, the claimed invention, as amended, meets the above-cited tests for obviousness by including embodiments such as the ability to measure stress and strain in the integrated circuit, wherein the stress and strain comprise any of mechanical and thermal stress and strain. As such, all of the claims of this application are, therefore, clearly in condition for allowance, and it is respectfully requested that the Examiner pass these claims to allowance and issue.

As declared by the Federal Circuit:

> In proceedings before the U.S. Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992) citing In re Fine, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988).

Here, the Examiner has not met the burden of establishing a prima facie case of obviousness. It is clear that, not only does Wei fail to disclose all of the elements of the claims of the present invention, particularly, the measuring of stress and strain in the integrated circuit, as discussed above, but also, if combined with Unger and Sheets, fails to disclose these elements as well. The unique elements of the claimed invention are clearly an advance over the prior art.

The Federal Circuit also went on to state:

> The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. . . . Here the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Fritch at 1784-85, citing In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Here, there is no suggestion that Wei, alone or in combination with Unger and Sheets teaches a method and apparatus containing all of the limitations of the claimed invention. Consequently, there is absent the "suggestion" or "objective teaching" that

would have to be made before there could be established the legally requisite "prima facie case of obviousness."

In view of the foregoing, the Applicants respectfully submit that the cited prior art reference, Wei, does not teach or suggest the features defined by amended independent claims 1, 11, and 21 (and newly rewritten independent claims 6 and 16) and as such, claims 1, 11, and 21 (and newly rewritten independent claims 6 and 16) are patentable over Wei alone or in combination with Unger and Sheets. Further, dependent claims 2, 4, 5, 7-10, 12, 14, 15. 17-20, 22, 24, and 25 are similarly patentable over Wei alone or in combination with Unger and Sheets, not only by virtue of their dependency from patentable independent claims, respectively, but also by virtue of the additional features of the invention they define. Thus, the Applicants respectfully request that these rejections be reconsidered and withdrawn.

Moreover, the Applicants note that all claims are properly supported in the specification and accompanying drawings, and no new matter is being added. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

II. Formal Matters and Conclusion

With respect to the rejections to the claims, the claims have been amended, above, to overcome these rejections. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the claims.

In view of the foregoing, Applicants submit that claims 1-2, 4-12, 14-22, and 24-25, all the claims presently pending in the application, are patentably distinct from the

prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0456.

Respectfully submitted,

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Mohammad S. Rahman
Registration No. 43,029

McGinn & Gibb, P.L.L.C.
2568-A Riva Road, Suite 304
Annapolis, MD 21401
Voice: (301) 261-8625
Fax: (301) 261-8825
Customer Number: 29154